

a housing for releasable placement on an animal; and

an electronic means operatively associated with said housing for detecting and processing information relating to number, duration, and frequency of mounts on said animal, said electronic means calculating and indicating optimum time to breed based on said information.

2. The estrus detection device as defined in claim 1, wherein said information includes if said duration of said mounts meet a preset threshold of time and if a preset number of said mounts occur within a predetermined period of time.

3. The estrus detection device as defined in claim 1, wherein said electronic means includes a microprocessor.

4. The estrus detection device as defined in claim 1, wherein said electronic means includes at least one battery.

5. The estrus detection device as defined in claim 1, wherein said electronic means includes a pressure sensitive switch.

6. The estrus detection device as defined in claim 1, wherein said electronic means further calculates and indicates suspect estrus and confirmed estrus.

7. The estrus detection device as defined in claim 1, wherein said electronic means includes a visible display means.

8. The estrus detection device as defined in claim 7, wherein said visible display means is at least one LED.

9. The estrus detection device as defined in claim 1, wherein said housing is hermetically sealed.

10. The estrus detection device as defined in claim 1, further comprising a reset means for resetting said electronic means.

11. A self-contained electronic estrus detection device comprising:

a housing for releasable placement on an animal; and

an indicating means for indicating suspect estrus, confirmed estrus and optimum time to breed.

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Please add the following new claims:

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12. The estrus detection device as defined in claim 6 wherein said suspect estrus is determined by said duration of a first mount meeting said preset threshold of time.

13. The estrus detection device as claimed in claim 6 wherein said confirmed estrus is determined by said duration of said mounts meeting said preset threshold of time and said preset number of said mounts occurring within a predetermined period of time.

14. The estrus detection device as defined in claim 2 wherein said optimum breeding time is a predetermined range of time from the first of said preset number of said mounts meeting said preset threshold and occurring within said predetermined period of time.

15. The estrus detection device as defined in claim 11 wherein said indicating means is located on the rear of said housing.

16. The estrus detection device as defined in claim 11 wherein said indicating means comprises at least one LED.

17. The estrus detection device as defined in claim 11 wherein said indicating means is 3 LED's, each of said 3 LED's indicating either suspect estrus, confirmed estrus or optimum time to breed.

18. The estrus detection device as defined in claim 2 wherein said preset threshold of time is about 3 seconds.

19. The estrus detection device as defined in claim 2 wherein said preset number of mounts is 3 mounts and said predetermined period of time is about 4 hours.

20. A self-contained electronic estrus detection device comprising:

a housing for releasable placement on an animal; and

an electronic means operatively associated with said housing for detecting and processing information relating to the number, duration, and frequency of mounts on said animal, said information forming the basis for determining if the duration of said mounts meet a preset threshold of time and if a preset number of said mounts occur within a predetermined period of time, said electronic means calculating and indicating suspect estrus, confirmed estrus and optimum time to breed if said duration of said mounts meet said preset threshold of time and if said preset number of said mounts occur within said predetermined period of time.

24

21. A self-contained electronic estrus detection device comprising:

a housing for releasable placement on an animal;

electronic means operatively associated with said housing for detecting and processing information relating to the number, duration and frequency of mounts on said animal; and

indicating means for indicating the beginning and end of optimum time to breed based on said information.

## REMARKS

This Amendment is in response to the first Office Action mailed on May 25, 2001. Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached changes are captioned "**Version with markings to show changes made.**"

The changes to the specification are solely to provide proper antecedent support for the claims. These changes add no new matter.